

REMARKS

Status Of Claims

Claims 1-58 are pending in the instant application. Claims 7-8, 14-15, 19-20, 25-26, 33-34, 38 and 43 have been canceled. Claims 16, 18 and 41 are amended herein. New claims 47-58 are proposed for addition. No new matter is believed to have been introduced by the present amendment. Therefore, upon entry of this amendment, claims 1-6, 9-13, 16-18, 21-24, 27-32, 35-37, 39-42, and 44-58 will be pending and under consideration. Reconsideration of the application as amended as set forth herein is respectfully requested.

Claim Objections

The Examiner has objected to claim 16 because of an informality wherein step (d) referred to itself instead of step (c). Claim 16 has been corrected herein as required in order to overcome this objection.

Traversal of Claim Rejections Under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-6, 9-13, 16-18, 21-24, 27-32, 35-37, 39-42 and 44-46 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,123,330 to Schaal. This rejection is respectfully traversed.

Regarding claims 1, 9, 16, 21, 27-29, 35-37, 39-40, 44 and 46, the Examiner contends that Schaal discloses a method for controlling a sheet feeding device

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wherein the disclosure teaches a method for monitoring resource units (sheets) including: (a) providing a group of sheets; (b) determining a thickness of one or more resource units; and (c) determining when the group of sheets reaches a predetermined size after one or more of the resource units has been moved from the group and responsive to the determination of thickness in step (b). The Examiner acknowledges that "Schaal fails to disclose an indicator for indicating when the stack is at a predetermined height (i.e. when the separating blade is approaching position sensor)". Official Action, page 3. However, the Examiner contends that indicators for stack height are well known in the art (citing U.S. Patent No. 5,971,392 to Lee, column 7, lines 16+). Therefore, the Examiner concludes that it would be obvious to one of ordinary skill in the art to add this feature to Schaal's device. Applicants respectfully disagree, as discussed in detail below.

Independent claims 1, 9, 16, 21, 29, 37, 41, 44 and 46 employ sheet thickness determination for indicating when a group of resource units, such as a stack of sheet articles for example, reaches a predetermined size. Schaal alone, or in combination with prior art describing stack height indicators (i.e., Lee), fails to disclose determining the thickness of one or more resource units and indicating when the group of resource units reaches a predetermined size responsive to the determination of thickness.

The Examiner contends that the method of Schaal teaches, *inter alia*, "determining when the group of sheets reaches a predetermined size after one or

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more of the resource units has been moved from the group and responsive to the determination of thickness in step (b) (Col. 2, lines 33+; Col. 2, lines 44+)". Official Action, page 3. This contention is respectfully traversed.

The method disclosed in Schaal includes measuring the thickness of the removed item (sheet article) via the deflection of a swiveling roller **SR**, by means of a rotary potentiometer **DP**. The sheet article thickness data is measured in a main control circuit **HR** and relayed to the separating blade **TM** and conveyor belt **UB** underneath it that hold the stack of sheet articles in place against a friction belt **RR**. Upon receiving the sheet article thickness data, the separating blade **TM** and conveyor belt **UB** are moved forward so as to transport the sheet stack by the exact amount of the measured sheet article thickness. In other words, the sheet article thickness data is used solely to advance the sheet stack by a corresponding distance. This data is in no way used for monitoring or determining the level (size) of the sheet stack itself.

The method disclosed in Schaal also includes measuring the sheet stack pressure outside of the sheet separation system. The stack pressure is controlled with the aid of two position sensors **S1** and **S2**, which are positioned to the left and right of the spring-mounted separating blade **TM**. If the stack pressure is too high, the separating blade **TM** approaches the position sensor **S1** (to the left), and if the stack pressure is too low, the separating blade **TM** approaches the position sensor **S2** (to the right). This stack pressure controlling mechanism has no relation to the

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sheet article thickness data described above and in no way results in determination of sheet stack size that is responsive to the determination of sheet article thickness.

Applicants respectfully submit that Schaal fails to disclose a method of indicating when a stack of sheet articles or other resource units reaches a predetermined level or size in any manner that is responsive to the determination of thickness. Schaal moves the stack to keep it at a certain level, unlike the claimed subject matter. Schaal uses the thickness measurement for a control function that is not related to level or size of the stack. Even adding a stack level sensor, such as found in Lee, would not result in determination of group size that is responsive to the determination of sheet thickness.

Regarding claims 2, 10, 22, 30 and 45, the Examiner states that Schaal's device is a mail conveyor. Claim 2 depends from claim 1. Claim 10 depends from claim 9. Claim 22 depends from claim 21. Claim 30 depends from claim 29. Claim 45 depends from claim 44. Therefore, the comments presented above relating to claims 1, 9, 21, 29 and 44 apply equally to claims 2, 10, 22, 30 and 45 since these dependent claims merely add additional limitations thereto.

Regarding claims 3, 5, 11, 13, 17, 23 and 31, the Examiner states that Schaal appears to detect the size of the stack before any sheets are removed from the stack. Therefore, the Examiner contends that since the position sensors are constantly checking the position of the separating blade (Col. 2, lines 44+), Schaal would detect the size of the stack before and during the removal of the sheets.

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Claims 3 and 5 depend from claim 1. Claims 11 and 13 depend from claim 9. Claim 17 depends from claim 16. Claim 23 depends from claim 21. Claim 31 depends from claim 29. Therefore, the comments presented above relating to claims 1, 9, 16, 21 and 29 apply equally to claims 3, 5, 11, 13, 17, 23 and 31 since these dependent claims merely add additional limitations thereto.

Additionally, the comments presented above relating to the method of measuring sheet stack pressure disclosed in Schaal describe how this stack pressure controlling mechanism has no relation to the sheet article thickness data function of Schaal and in no way results in determination of sheet stack size that is responsive to the determination of sheet article thickness, as is taught in the present subject matter.

Regarding Claims 4, 12, 24 and 32, the Examiner contends that Schaal “discloses a sensor which detects when the size of the stack is less than a second predetermined size (See S2 in Figure 1)”. Official Action, page 3. Claim 4 depends from claim 3 that depends from claim 1. Claim 12 depends from claim 11 that depends from claim 9. Claim 24 depends from claim 23 that depends from claim 21. Claim 32 depends from claim 29. Therefore, the comments presented above relating to claims 1, 9, 21 and 29 apply equally to claims 4, 12, 24 and 32 since these dependent claims merely add additional limitations thereto.

Additionally, the function of sensor **S2** in Schaal is in assisting with adjustment of the stack pressure. If the stack pressure is too low, separating blade **TM** is moved towards friction belts **RR** and sensor **S2**. When separating blade **TM** approaches

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sensor **S2**, the sensor switches. Therefore, the sensors disclosed in Schaal have no relation to the sheet article thickness data function of Schaal and in no way result in determination of sheet stack size that is responsive to the determination of sheet article thickness, as is taught in the present subject matter.

Regarding Claims 6 and 18, the Examiner contends that Schaal feeds the sheets from the bottom of the stack (See Figure 1). Claim 6 depends from claim 1. Claim 18 depends from claim 16. Therefore, the comments presented above relating to claims 1 and 16 apply equally to claims 6 and 18 since these dependent claims merely add additional limitations thereto.

Finally, regarding Claims 41 and 42, the Examiner contends that Schaal discloses a main controller (HR). Claim 41 and its dependent claim 42 are directed to a computer program product for monitoring resource units in a stack that is capable of detecting a size of resource units in a group of resource units and indicating, based upon the thicknessess of at least one of the resource units, when the group of resource units reaches a predetermined size after one or more resource units has been moved from the group. Therefore, the arguments above that note the significant distinctions of Schaal from the other independent claims of the present subject matter apply equally to claims 41 and 42.

Applicants respectfully submit that no *prima facie* case of obviousness exists and that the teachings of Schaal alone, or in combination with prior art describing stack height indicators, do not teach or suggest each and every element of the

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presently claimed subject matter. As such, it is respectfully submitted that claims 1–6, 9–13, 16–18, 21–24, 27–32, 35–37, 39–42 and 44–46 are not obvious in view of the cited reference and that the rejection of these claims under 35 U.S.C. §103(a) should be withdrawn and the claims allowed at this time.

Allowable Subject Matter

Applicants acknowledge that the Examiner has indicated that claims 7-8, 14-15, 19-20, 25-26, 33-34, 38, and 43 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Original dependent claim 7 has been combined with original independent claim 1 in order to form new claim 47. Please note that while the subject matter of the original claims was combined, the phrase “less than” was replaced with the phrase “greater than” in the first line of paragraph (d)(iii) of claim 47 in order to correct and clarify the claim language. Likewise, the term “first” was inserted in front of “predetermined size” in the last element of the claim in order to differentiate between the first predetermined size and the second predetermined size.

Original dependent claim 8 has been combined with original independent claim 1 in order to form new claim 48.

Original dependent claim 14 has been combined with original independent claim 9 in order to form new claim 49. Please note that while the subject matter of the original claims was combined, the phrase “group of” was inserted in front of

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“resource units” in the second line of paragraph (c)(ii) of claim 49, and the term “number” was replaced with the term “size” in the last line of paragraph (c)(ii) of claim 49 in order to correct an obvious error in the claim language.

Original dependent claim 15 has been combined with original independent claim 9 in order to form new claim 50.

Original dependent claim 19 has been combined with original independent claim 16 in order to form new claim 51. Please note that while the subject matter of the original claims was combined, the phrase “less than” was replaced with the phrase “greater than” in the last paragraph of the claim in order to correct and clarify the claim language. Likewise, the term “first” was inserted in front of “predetermined level” in the last paragraph of the claim in order to differentiate between the first predetermined level and the second predetermined level.

Original dependent claim 20 has been combined with original independent claim 16 in order to form new claim 52. Original dependent claim 25 has been combined with original independent claim 21 in order to form new claim 53.

Original dependent claim 26 has been combined with original independent claim 21 and original dependent claim 25 in order to form new claim 54. Please note that while the subject matter of the original claims was combined, the term “container” was replaced with the term “group” in the paragraphs (d) and (e) of the claim in order to maintain consistency with paragraph (c) of the claim.

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Original dependent claim 33 has been combined with original independent claim 21 in order to form new claim 55.

Original dependent claim 34 has been combined with original independent claim 21 and original dependent claim 33 in order to form new claim 56. Please note that while the subject matter of the original claims was combined, the term "container" was replaced with the term "group" in the paragraph (e) of the claim in order to maintain consistency with paragraphs (c) and (d) of the claim.

Original dependent claim 38 has been combined with original independent claim 37 in order to form new claim 57.

Lastly, original dependent claim 43 has been combined with original independent claim 41 in order to form new claim 58. Please note that while the original subject matter of the original claims was combined, the terms "group of" was inserted in front of "resource units" in the last paragraph of the claim, the term "number" was replaced with the term "size" in the second line of the last paragraph of the claim, and the terms "less than" were replaced with the terms "greater than" in the last line of the last paragraph of the claim in order to correct and clarify the claim language.

Thus, applicants respectfully submit that new claims 47-58 are now allowable and request formal notification of allowance of these claims.

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CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and such action is earnestly solicited.

If any minor issues should remain outstanding after the Examiner has had an opportunity to study the Amendment and Remarks, it is respectfully requested that the Examiner telephone the undersigned attorney so that all such matters may be resolved and the application placed in condition for allowance without the necessity for another Action and/or Amendment.

DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any payments associated with the filing of this Response to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS WILSON & TAYLOR, P.A.

Date: February 12, 2004

By: _____


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